## WHAT IS CLAIMED IS:

1. A compound of formula (I):

$$\begin{array}{c|c} OH & H \\ \hline \\ HO & R^4 \end{array} \qquad \begin{array}{c} N & R^1 \\ \hline \\ R^2 \end{array} \qquad (I)$$

wherein:

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 $R^1$  is methoxy or ethoxy, and  $R^2$  is hydrogen or phenyl; or  $R^1$  is hydrogen, and  $R^2$  is phenyl; and

R<sup>3</sup> is -CH<sub>2</sub>OH or -NHCHO, and R<sup>4</sup> is hydrogen; or R<sup>3</sup> and R<sup>4</sup> taken together are -NHC(=O)CH=CH-;

or a pharmaceutically-acceptable salt or solvate or stereoisomer thereof.

2. The compound of claim 1 which is a compound of formula (II):

HO 
$$\stackrel{\text{OH H}}{\longrightarrow}$$
  $\stackrel{\text{N}}{\longrightarrow}$   $\stackrel{\text{R}^1}{\longrightarrow}$   $\stackrel{\text{R}^2}{\longrightarrow}$  (II)

wherein  $R^1$  is methoxy or ethoxy, and  $R^2$  is hydrogen or phenyl; or wherein  $R^1$  is hydrogen, and  $R^2$  is phenyl; or a pharmaceutically-acceptable salt or solvate or stereoisomer thereof.

20 3. The compound of claim 1 which is a compound of formula (III):

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wherein R<sup>1</sup> is methoxy or ethoxy, and R<sup>2</sup> is hydrogen or phenyl; or wherein R<sup>1</sup> is hydrogen, and R<sup>2</sup> is phenyl; or a pharmaceutically-acceptable salt or solvate or stereoisomer thereof.

5 4. The compound of claim 1 which is a compound of formula (IV):

HO 
$$\stackrel{\text{OH H}}{\underset{\text{N}}{\overset{\text{N}}{\underset{\text{N}}}{\overset{\text{N}}{\underset{\text{N}}}{\overset{\text{N}}{\underset{\text{N}}}{\overset{\text{N}}{\underset{\text{N}}}{\overset{\text{N}}{\underset{\text{N}}}{\overset{\text{N}}{\underset{\text{N}}}{\overset{\text{N}}{\underset{\text{N}}}{\overset{\text{N}}{\underset{\text{N}}}{\overset{\text{N}}{\underset{\text{N}}{\overset{\text{N}}{\underset{\text{N}}}{\overset{\text{N}}{\overset{\text{N}}{\underset{\text{N}}}{\overset{\text{N}}{\overset{\text{N}}}{\overset{\text{N}}}{\overset{\text{N}}{\overset{\text{N}}}{\overset{\text{N}}}{\overset{\text{N}}}{\overset{\text{N}}}{\overset{\text{N}}{\overset{\text{N}}{\overset{\text{N}}}{\overset{\text{N}}{\overset{\text{N}}}{\overset{\text{N}}}{\overset{\text{N}}}{\overset{\text{N}}}{\overset{\text{N}}}{\overset{\text{N}}}{\overset{\text{N}}{\overset{\text{N}}}{\overset{\text{N}}{\overset{\text{N}}}{\overset{\text{N}}{\overset{\text{N}}}{\overset{\text{N}}}{\overset{\text{N}}}{\overset{\text{N}}}}{\overset{\text{N}}{\overset{\text{N}}}}{\overset{\text{N}}{\overset{\text{N}}}{\overset{\text{N}}{\overset{\text{N}}}{\overset{\text{N}}}{\overset{\text{N}}}{\overset{\text{N}}}{\overset{\text{N}}}{\overset{\text{N}}}{\overset{\text{N}}{\overset{N}}}{\overset{\text{N}}}{\overset{\text{N}}{\overset{N}}}{\overset{\text{N}}}}{\overset{\text{N}}{\overset{N}}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}}{\overset{N}}{\overset{N}}{\overset{N}}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}}{\overset{N}}{\overset{N}}{\overset{N}}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}{\overset{N}}}{\overset{N}}{$$

(IV)

wherein R<sup>1</sup> is methoxy or ethoxy, and R<sup>2</sup> is hydrogen or phenyl; or wherein R<sup>1</sup> is hydrogen, and R<sup>2</sup> is phenyl; or a pharmaceutically-acceptable salt or solvate or stereoisomer thereof.

- 5. The compound of claim 1 wherein  $R^1$  is methoxy and  $R^2$  is phenyl.
- 6. The compound of claim 1 wherein  $R^1$  is ethoxy and  $R^2$  is phenyl.
- 7. The compound of claim 4 wherein  $R^1$  is methoxy and  $R^2$  is phenyl.
- 8. The compound of claim 1 wherein the compound is a mixture of stereoisomers wherein the amount of the (R) stereoisomer is greater than the amount of the (S) stereoisomer.
  - 9. The compound of claim 1 wherein the compound is the (R) stereoisomer.
  - 10. A compound selected from the group consisting of:

 $N-{2-[4-(3-phenyl-4-methoxyphenyl)aminophenyl]ethyl}-2-hydroxy-2-(3-hydroxymethyl-4-hydroxyphenyl)ethylamine;$ 

*N*-{2-[4-(4-ethoxyphenyl)aminophenyl]ethyl}-2-hydroxy-2-(3-hydroxymethyl-4-hydroxyphenyl)ethylamine;

	N-{2-[4-(3-phenyl)aminophenyl]ethyl}-2-hydroxy-2-(3-hydroxymethyl-4-
	hydroxyphenyl)ethylamine;
	N-{2-[4-(3-phenyl-4-methoxyphenyl)aminophenyl]ethyl}-2-hydroxy-2-(8-
	hydroxy-2(1H)-quinolinon-5-yl)ethylamine;
5	N-{2-[4-(4-methoxyphenyl)aminophenyl]ethyl}-2-hydroxy-2-(3-
	hydroxymethyl-4-hydroxyphenyl)ethylamine;
	N-{2-[4-(3-phenyl-4-ethoxyphenyl)aminophenyl]ethyl}-2-hydroxy-2-(3-
	hydroxymethyl-4-hydroxyphenyl)ethylamine;
	N-{2-[4-(3-phenyl-4-methoxyphenyl)aminophenyl]ethyl}-2-hydroxy-2-(3-
10	formamido-4-hydroxyphenyl)ethylamine;
	N-{2-[4-(4-ethoxyphenyl)aminophenyl]ethyl}-2-hydroxy-2-(3-formamido
	4-hydroxyphenyl)ethylamine;
	N-{2-[4-(3-phenylphenyl)aminophenyl]ethyl}-2-hydroxy-2-(3-formamido
	4-hydroxyphenyl)ethylamine;
15	N-{2-[4-(3-phenyl-4-ethoxyphenyl)aminophenyl]ethyl}-2-hydroxy-2-(3-
	formamido-4-hydroxyphenyl)ethylamine;
	N-{2-[4-(4-methoxyphenyl)aminophenyl]ethyl}-2-hydroxy-2-(3-
	formamido-4-hydroxyphenyl)ethylamine;
	N-{2-[4-(4-ethoxyphenyl)aminophenyl]ethyl}-2-hydroxy-2-(8-hydroxy-
20	2(1 <i>H</i> )-quinolinon-5-yl)ethylamine;
	N-{2-[4-(3-phenylphenyl)aminophenyl]ethyl}-2-hydroxy-2-(8-hydroxy-
	2(1 <i>H</i> )-quinolinon-5-yl)ethylamine;
	N-{2-[4-(3-phenyl-4-ethoxyphenyl)aminophenyl]ethyl}-2-hydroxy-2-(8-
	hydroxy-2(1H)-quinolinon-5-yl)ethylamine; and
25	N-{2-[4-(4-methoxyphenyl)aminophenyl]ethyl}-2-hydroxy-2-(8-hydroxy-
	2(1 <i>H</i> )-quinolinon-5-yl)ethylamine;
	or a pharmaceutically-acceptable salt or solvate or stereoisomer thereof.
	11. A compound selected from the group consisting of:
30	$N$ -{2-[4-(3-phenyl-4-methoxyphenyl)aminophenyl]ethyl}-( $R$ )-2-hydroxy-
	2-(3-hydroxymethyl-4-hydroxyphenyl)ethylamine;
	$N$ -{2-[4-(4-ethoxyphenyl)aminophenyl]ethyl}-( $R$ )-2-hydroxy-2-(3-
	hydroxymethyl-4-hydroxyphenyl)ethylamine;

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yl)ethylamine.

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N-\{2-[4-(3-phenyl)aminophenyl]ethyl\}-(R)-2-hydroxy-2-(3-phenyl)aminophenyl]ethyl\}
                                           hydroxymethyl-4-hydroxyphenyl)ethylamine;
                                                                     N-\{2-[4-(3-phenyl-4-methoxyphenyl)aminophenyl]ethyl\}-(R)-2-hydroxy-
                                            2-(8-hydroxy-2(1H)-quinolinon-5-yl)ethylamine;
   5
                                                                     N-\{2-[4-(4-methoxyphenyl)aminophenyl]ethyl\}-(R)-2-hydroxy-2-(3-methoxyphenyl)aminophenyl]ethyl\}-(R)-2-hydroxy-2-(3-methoxyphenyl)aminophenyl]ethyl
                                            hydroxymethyl-4-hydroxyphenyl)ethylamine;
                                                                     N-\{2-[4-(3-phenyl-4-ethoxyphenyl)aminophenyl]ethyl\}-(R)-2-hydroxy-2-
                                            (3-hydroxymethyl-4-hydroxyphenyl)ethylamine;
                                                                     N-\{2-[4-(3-phenyl-4-methoxyphenyl)aminophenyl]ethyl\}-(R)-2-hydroxy-
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                                            2-(3-formamido-4-hydroxyphenyl)ethylamine;
                                                                     N-\{2-[4-(4-ethoxyphenyl)aminophenyl]ethyl\}-(R)-2-hydroxy-2-(3-
                                            formamido-4-hydroxyphenyl)ethylamine;
                                                                     N-\{2-[4-(3-phenylphenyl)aminophenyl]ethyl\}-(R)-2-hydroxy-2-(3-phenylphenyl)aminophenyl]ethyl\}-(R)-2-hydroxy-2-(3-phenylphenyl)aminophenyl]ethyl
                                            formamido-4-hydroxyphenyl)ethylamine:
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                                                                     N-\{2-[4-(3-phenyl-4-ethoxyphenyl)aminophenyl]ethyl\}-(R)-2-hydroxy-2-
                                            (3-formamido-4-hydroxyphenyl)ethylamine;
                                                                      formamido-4-hydroxyphenyl)ethylamine;
                                                                     N-\{2-[4-(4-\text{ethoxyphenyl})\text{aminophenyl}]\text{ethyl}\}-(R)-2-\text{hydroxy-}2-(8-
20
                                            hydroxy-2(1H)-quinolinon-5-yl)ethylamine;
                                                                     N-\{2-[4-(3-phenylphenyl)aminophenyl]ethyl\}-(R)-2-hydroxy-2-(8-phenylphenyl)aminophenylph
                                            hydroxy-2(1H)-quinolinon-5-yl)ethylamine;
                                                                     N-\{2-[4-(3-phenyl-4-ethoxyphenyl)aminophenyl]ethyl\}-(R)-2-hydroxy-2-
                                            (8-hydroxy-2(1H)-quinolinon-5-yl)ethylamine; and
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                                                                     N-\{2-[4-(4-methoxyphenyl)aminophenyl]ethyl\}-(R)-2-hydroxy-2-(8-methoxyphenyl)aminophenyl]ethyl\}-(R)-2-hydroxy-2-(8-methoxyphenyl)aminophenyl]ethyl
                                            hydroxy-2(1H)-quinolinon-5-yl)ethylamine;
                                            or a pharmaceutically-acceptable salt or solvate or stereoisomer thereof.
                                            12.
                                                                      The compound of claim 11 wherein the compound is N-\{2-[4-(3-pheny]-4-(3-phen
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methoxyphenyl)aminophenyl]ethyl}-(R)-2-hydroxy-2-(8-hydroxy-2(1H)-quinolinon-5-

13. A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 1 or 4 and a pharmaceutically-acceptable carrier.

- 14. The pharmaceutical composition of claim 13, wherein the composition is5 formulated for administration by inhalation.
  - 15. The pharmaceutical composition of claim 13, wherein the composition further comprises a therapeutically effective amount of a steroidal anti-inflammatory agent.

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- 16. The pharmaceutical composition of claim 13, wherein the composition further comprises a therapeutically effective amount of a compound selected from the group consisting of a muscarinic receptor antagonist agent, a phosphodiesterase inhibitor agent, an immunoglobulin antibody, a leukotriene antagonist agent, a cytokine antagonist agent, a protease inhibitor, cromolyn sodium, nedocromil sodium, and sodium cromoglycate.
- 17. A method of treating a disease or condition in a mammal associated with β2 adrenergic receptor activity, the method comprising administering to the mammal, a
   20 therapeutically effective amount of a pharmaceutical composition of claim 13.
  - 18. The method of claim 17 wherein the disease or condition is a pulmonary disease.
- 25 19. The method of claim 18 wherein the pulmonary disease is asthma or chronic obstructive pulmonary disease.
- 20. The method of claim 17 wherein the disease or condition is selected from the group consisting of pre-term labor, neurological disorders, cardiac disorders, and30 inflammation.
  - 21. The method of claim 17 further comprising administering a therapeutically effective amount of a steroidal anti-inflammatory agent.

22. The method of claim 17 further comprising administering a therapeutically effective amount of a compound selected from the group consisting of a muscarinic receptor antagonist agent, a phosphodiesterase inhibitor agent, an immunoglobulin antibody, a leukotriene antagonist agent, a cytokine antagonist agent, a protease inhibitor, cromolyn sodium, nedocromil sodium, and sodium cromoglycate.

23. A method of modulating the activity of a  $\beta_2$  adrenergic receptor, the method comprising contacting a  $\beta_2$  adrenergic receptor with a modulating amount of a compound as described in claim 1.

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